

Title (en)
OIL CONTROL VALVE AND METHOD OF MOUNTING THE OIL CONTROL VALVE

Title (de)
REGELVENTIL FÜR ÖL UND VERFAHREN ZUM MONTIEREN EINES SOLCHEN VENTILS

Title (fr)
SOUPAPE DE COMMANDE D'ECOULEMENT D'HUILE ET SON PROCEDE DE MONTAGE

Publication
EP 1340886 B1 20060628 (EN)

Application
EP 00979062 A 20001204

Priority
JP 0008560 W 20001204

Abstract (en)
[origin: EP1340886A1] An oil control valve (60) that controls a variable valve timing gear for adjusting operation timing of at least one of exhaust and intake camshafts mounted on a cylinder head (1) of an internal combustion engine. The oil control valve comprises a housing (3) provided with plural oil lines; a spool type valve (5) that moves in the housing to open and close said oil lines; and a solenoid (31) having a metal case (33) that forms a part of a magnetic circuit and driving the spool type valve; and this housing (3) is mounted on the cylinder head (1) of said internal combustion engine. At least a part of the metal case (33) passes through a through hole (183) provided through a cylinder head cover (18) covering the cylinder head (1) and is disposed outside the cylinder head cover (18). As a result, all the essential part of the oil control valve (60) is disposed inside the head cover (18), and therefore space factor is improved. Even in case of oil leakage out of the solenoid (31), the oil flows in the head cover, and the oil does not leak out of the engine. <IMAGE>

IPC 8 full level
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CPC (source: EP US)
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Cited by
EP1884629A1; GB2477334A; GB2409538A; GB2409538B; DE102005029083B4; DE202008013310U1; US9423011B2; EP2881620B1

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